

A. REMARKS

The Examiner is thanked for the performance of a new search. No amendments have been made herein. Hence, Claims 1-4, 6-9, 16-23, 25-28 and 30-32 are pending in this application. All issues raised in the Office Action mailed October 29, 2003 are addressed hereinafter.

REJECTION OF CLAIMS 1, 16 AND 20 UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

Claims 1, 16 and 20 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The stated basis of the rejection is that “[i]t is unclear that the first node or second node sends a second work request to the third process on the third node.”

Claims 1, 16 and 20 do not specify that either the first node or the second node provides the second work request to the third process on the third node because the invention is not limited to either the first node or the second node performing this function. For example, any type of intermediate entity or process may provide the second work request to the third process on the third node and the invention is not limited to either the first node or the second node performing this function.

In view of the foregoing, it is respectfully submitted that Claims 1, 16 and 20 satisfy the requirements of 35 U.S.C. § 112, second paragraph. Accordingly, reconsideration and withdrawal of the rejection of Claims 1, 16 and 20 under 35 U.S.C. § 112, second paragraph, is respectfully requested.

REJECTION OF CLAIMS 30-32 UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

Claims 30-32 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The stated basis of the rejection is that “[i]t is unclear that the updated first work request is performed with or without mapping data.”

It is not clear exactly what is meant by this rejection since Claims 30-32 do not recite that the updated first work request is “performed.” Claims 30-32 require that the determination that first work is to be performed on the second node be made based upon the first work and the mapping data. Claims 30-32 do not require that the updated first work request be generated or provided to the second process on the second node based upon mapping data. It is therefore respectfully submitted that Claims 30-32 are clear with respect to when mapping data is required. The Examiner is invited to contact the undersigned by telephone to clarify any remaining issues, if the Examiner believes that such contact would further the prosecution of this application.

In view of the foregoing, it is respectfully submitted that Claims 30-32 satisfy the requirements of 35 U.S.C. § 112, second paragraph. Accordingly, reconsideration and withdrawal of the rejection of Claims 30-32 under 35 U.S.C. § 112, second paragraph, is respectfully requested.

REJECTION OF CLAIMS 30-32 UNDER 35 U.S.C. § 112, FIRST PARAGRAPH

Claims 30-32 were rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the enablement requirement. The stated basis of the rejection is that “an updated work request is not described in the application.”

The text at Page 9, line 7 through Page 10, line 8 of the specification describes how director 302 sends a work request to a server process on one or more of the server nodes N3-N5 that can perform the requested work. This text includes a discussion that when the particular work request from client node N1 does not specify that client node N1 is to receive the results of the particular work, that director 302 determines where the work request originated and generates a new particular work request that specifies where the results of the particular work are to be sent.

It is respectfully submitted that this description is sufficient to enable one of ordinary skill in the art to make and use the invention without undue experimentation. One of ordinary skill in the art would understand that an updated work request is a new work request. In view of the foregoing, it is respectfully submitted that Claims 30-32 satisfy the requirements of 35 U.S.C. § 112, first paragraph. Accordingly, reconsideration and withdrawal of the rejection of Claims 30-32 under 35 U.S.C. § 112, first paragraph, is respectfully requested. If the Examiner believes that the description in the specification of generating a new work request is not sufficient to support the “updated first work request” recited in Claims 30-32, Applicant is willing to amend the term “updated first work request” to “new work request”. The Examiner is also authorized to make this change via Examiner’s amendment, if the Examiner so chooses.

REJECTION OF CLAIMS 1-4, 6-9, 16-23, 25-28 AND 30-32 UNDER 35 U.S.C. § 103(a)

Claims 1-4, 6-9, 16-23, 25-28 and 30-32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Boll* et al., U.S. Patent No. 5,644,720 (hereinafter “*Boll*”) in view of *Baylor* et al., U.S. Patent No. 5,742,812 (hereinafter “*Baylor*”). It is respectfully submitted that Claims 1-4, 6-9, 16-23, 25-28 and 30-32 are patentable over *Boll* and *Baylor* for at least the reasons provided hereinafter.

CLAIM 1

Claim 1 recites a method for processing data on a distributed computing system that includes a plurality of nodes that requires the steps of:

“maintaining mapping data that specifies work that can be performed by each of the plurality of nodes;
in response to receiving a first work request to perform first work from a first process on a first node from the plurality of nodes, determining based upon the first work and the mapping data, that the first work is to be performed on a second node from the plurality of nodes;
providing the first work request to a second process on the second node, wherein the first work request specifies that the first process is to directly receive results of the first work;
determining based upon the first work and the mapping data, that the first work is also to be performed on a third node from the plurality of nodes, and
providing a second work request to a third process on the third node, wherein the second work request specifies that results of the first work performed on the third node are to be provided directly to the first process.”

It is understood from the Office Action that any of the client applications 12, 14, 16 of *Boll* are considered to be the “first process” recited in Claim 1 and that any of the client servers 28-36 of *Boll* are considered to be the “second process” recited in Claim 1. It is further understood that a transaction request made by client applications 12, 14, 16 to communications interface 24 is considered to be the “first work request” recited in Claim 1. The transaction request is a request by client applications 12, 14, 16 for the identity of a client server 28-36 that can satisfy the list of server attributes specified in the transaction request. It is also understood that the client server 28-36 attributes registered with communications interface 24 are considered to be the “mapping data” recited in Claim 1.

In view of the foregoing, it is respectfully submitted that *Boll* does not teach or suggest “in response to receiving a first work request to perform first work from a first process on a first node from the plurality of nodes, determining based upon the first work and the mapping data,

that the first work is to be performed on a second node from the plurality of nodes” and “providing the first work request to a second process on the second node, wherein the first work request specifies that the first process is to directly receive results of the first work” since these steps require that the same first work request be both received from the first process on the first node and provided to the second process on the second node.

In *Boll*, client applications 12, 14, 16 generate and provide transaction requests to communications interface 24. Communications interface 24 processes the transaction request received from client applications 12, 14, 16 against the client server 28-36 attributes registered with communications interface 24. Communications interface 24 does not forward the transaction request to client servers 28-36. Also, client applications 12, 14, 16 do not send the transaction request to client servers 28-36. Rather, once client applications 12, 14, 16 receive the identifying data from communications interface 24, client applications 12, 14, 16 initiate a direct transaction with client servers 28-36. It is therefore respectfully submitted that the requirement that the same first work request be both received from the first process on the first node and provided to the second process on the second node, as set forth in the second and third steps of Claim 1, is not taught or suggested by *Boll*.

The Office Action admits that the step of “providing a second work request to a third process on the third node, wherein the second work request specifies that results of the first work performed on the third node are to be provided directly to the first process” is not taught or suggested by *Boll* and relies upon the text at Col. 10, lines 1-65 of *Baylor*. The text at this portion of *Baylor* is a portion of Claim 1 and all of Claims 2-12. The assertion in the Office Action that the text at this portion of *Baylor* teaches “[i]t was well-known in the art that in a network environment includes a plurality of clients server or intermediate nodes, a second

request was sent to specify some criteria which is different to the first request,” may be true, but this is not what the aforementioned step of Claim 1 requires. Claim 1 requires “providing a second work request to a third process on the third node, wherein the second work request specifies that results of the first work performed on the third node are to be provided directly to the first process,” which is not in any way taught or suggested by this portion of *Baylor*. This portion of *Baylor* does not teach or suggest “*wherein the second work request specifies that results of the first work performed on the third node are to be provided directly to the first process,*” as is required by Claim 1 (emphasis added). The Examiner is invited to identify specific portions of *Baylor* that teach or suggest all limitations of the aforementioned providing step. The Office Action also states “[see Kusuda references, col 20 line 30-col 2 line 43]”. None of the rejections in the current Office Action identify or rely upon a “Kusuda” reference.

Therefore, no corresponding remarks are provided herein.

In view of the foregoing, it is respectfully submitted that Claim 1 includes at least one limitation that is not taught or suggested by *Boll* and *Baylor*, alone or in combination and is therefore patentable over *Boll* and *Baylor*.

CLAIMS 2-4 AND 6-9

Claims 2-4 and 6-9 depend from Claim 1 and include all of the limitations of Claim 1. It is therefore respectfully submitted that Claims 2-4 and 6-9 are patentable over *Boll* and *Baylor* for at least the reasons set forth herein with respect to Claim 1. Furthermore, it is respectfully submitted that Claims 2-4 and 6-9 recite additional limitations that independently render them patentable over *Boll* and *Baylor*.

CLAIMS 16-19

Claims 16-19 include limitations similar to Claims 1-4 and 6-9, except in the context of a distributed computing system. It is therefore respectfully submitted that Claims 16-19 are patentable over *Boll* and *Baylor* for at least the reasons set forth herein with respect to Claims 1-4 and 6-9.

CLAIMS 20-23 AND 25-28

Claims 20-23 and 25-28 include limitations similar to Claims 1-4 and 6-9, except in the context of a computer-readable medium. It is therefore respectfully submitted that Claims 20-23 and 25-28 are patentable over *Boll* and *Baylor* for at least the reasons set forth herein with respect to Claims 1-4 and 6-9.

CLAIMS 30-32

It is respectfully submitted that Claim 31 includes at least one limitation that is not in any way taught or suggested by *Boll* and *Baylor*, alone or in combination. For example, Claim 31 requires the step of “generating an updated first work request that specifies that the first process is to directly receive results of performing the first work” and “providing the updated first work request to a second process on the second node.” As set forth with respect to Claim 1, it is understood from the Office Action that a transaction request made by client applications 12, 14, 16 to communications interface 24 is considered to be the “first work request” recited in Claim 1. Given this assertion, there is no teaching or suggestion in *Boll* of “generating an updated first work request that specifies that the first process is to directly receive results of performing the first work” since *Boll* does not teach or suggest generating updated transaction requests.

The Office Action also appears to assert that the periodic reporting by client applications 12, 14, 16 to communications interface 24 of their operational state is somehow related to generating an updated first work request. Applicant fails to see how the periodic reporting by client applications 12, 14, 16 has anything to do with generating an updated first work request. The Office Action also appears to assert that a client server 28-36 processing a work request from client applications 12, 14, 16 in the event of a failure constitutes generating an updated first request. Applicant fails to see how this has any relation to generating an updated first work request as this would simply represent another client server 28-36 processing the same work request, not an updated work request. The Examiner is invited to clearly articulate how the “generating” and “providing” steps of Claim 31 are in any way taught or suggested by *Boll*.

Based on the foregoing, it is respectfully submitted that Claim 31 includes at least one limitation that is not in any way taught or suggested by *Boll* and *Baylor*, alone or in combination, and is therefore patentable over *Boll* and *Baylor*.

Claims 30 and 32 recite limitations similar to Claim 31, except in the context of a method and computer-readable medium, respectively.

In view of the foregoing, reconsideration and withdrawal of the rejection of Claims 1-4, 6-9, 16-23, 25-28 and 30-32 under 35 U.S.C. § 103(a) as being unpatentable over *Boll* in view of *Baylor* is respectfully requested.

REJECTION OF CLAIMS 1-4, 6-9, 16-23, 25-28 AND 30-32 UNDER 35 U.S.C. § 103(a)

Claims 1-4, 6-9, 16-23, 25-28 and 30-32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Pitkin et al.*, U.S. Patent No. 5,341,477 (hereinafter “*Pitkin*”) in view of *Nguyen*, U.S. Patent No. 6,353,916. *Nguyen* has a filing date of October 28, 1999 and an issue date of March 18, 2003. Given that the present application has a filing date of April 23, 1999, it

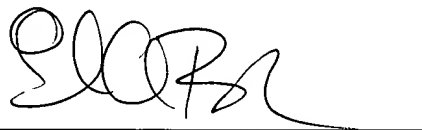
is respectfully submitted that *Nguyen* does not qualify as prior art under 35 U.S.C. § 103(a) with respect to the present application. Accordingly, reconsideration and withdrawal of the rejection of Claims 1-4, 6-9, 16-23, 25-28 and 30-32 under 35 U.S.C. § 103(a) as being unpatentable over *Pitkin* in view of *Nguyen* is respectfully requested.

It is respectfully submitted that all of the pending claims are in condition for allowance and the issuance of a notice of allowance is respectfully requested. If there are any additional charges, please charge them to Deposit Account No. 50-1302.

The Examiner is invited to contact the undersigned by telephone if the Examiner believes that such contact would be helpful in furthering the prosecution of this application.

Respectfully submitted,

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On December 31, 2003

By


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